

STAFFS: Cannock Chase, 24.ix.1983 — Anson's Bank, Sycamores Hill, Satnall Hills; Penkridge Bank, viii.1984; Highgate Common, 25.ix.1982; Forest Covert; Kinver Edge, 25.ix.1982; Whittington Heath, 8.ix.1985; Wyrley Common, 26.viii.1985; Chasewater, 26.viii.1985; Pelsall Common, 6.ix.1985; Apedale (R. Hill, pers. com., 1990).

SALOP: Wixall Moss, 6.vii.1986; Cramer Gutter, 2.ix.1984 and 17.viii.1985; Prees Heath, 6.vii.1986; Wrekin; Alverley, slag heap, vii.1986; Clee Hill, 9.viii.1986; Long Mynd, 9.viii.1986; Plowden, 9.viii.1986.

(To be concluded)

Second brood *Spilosoma lubricipeda* L., the White Ermine (Lep.: Arctiidae) in Ayrshire

A single male of *S. lubricipeda* was caught in the Rothamsted Insect Light Survey (R.I.S.) light trap at Culzean Castle, Ayrshire (Site No. 264, OS grid ref. NS 235 095) on 10.ix.1990. This individual represents a partial second emergence: first brood moths were caught in the trap between 5.v. and 4.vii.1990. Reference to the R.I.S. database shows that *S. lubricipeda* usually flies between mid-May and mid-July at this site, though first brood individuals have been caught between 8.v.(1981) and 5.viii.(1979). Despite 15 years of continuous trapping at Culzean Castle, the only other instance of a second emergence is recorded on 5.ix.1975.

Skinner, B. (*Colour Identification Guide to Moths of the British Isles*, Viking, Harmondsworth, 1984) and others state that there is an occasional second emergence of this species. Examination of the R.I.S. database confirms this. From a total of over 40,000 *S. lubricipeda* records, there are 27 captures of second brood individuals. Apart from four Scottish records, three of which were during the hot summer of 1976, these are all from Wales and England south of Lancashire and Lincolnshire. Seven (approx. one third) were from Kent, Hampshire and the Channel Islands.

From these records it appears that bivoltinism in *S. lubricipeda* is unusual and occurs mainly in southern localities. In Scotland a second emergence is rare and usually restricted to hot summers such as 1976 and 1990. Continued monitoring of bivoltinism in this species may reveal responses to predicted climatic change.

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